

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: FRED ZITOMER Examiner #: 69047 Date: 4/28/03
 Art Unit: 1713 Phone Number 303-2461 Serial Number: 10/086 844
 Mail Box and Bldg/Room Location: CP3 BE14 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Perfluorodiacyl Peptides as Polymerization Initiators
 Inventors (please provide full names): Navarrini et al.

Earliest Priority Filing Date: 3/8/01

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

*Compounds of claim 1 - Formula (A)
 Compounds are of particular interest.*

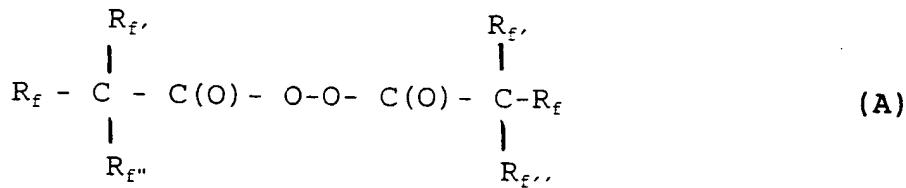
STAFF USE ONLY		Type of Search	Vendors and cost where applicable
Searcher:	<u>Ed</u>	NA Sequence (#)	STN <u>\$ 251.87</u>
Searcher Phone #:		AA Sequence (#)	Dialog
Searcher Location:		Structure (#)	<u>(3) (Subjects)</u> Questel/Orbit
Date Searcher Picked Up:		Bibliographic	Dr. Link
Date Completed:	<u>4-29-03</u>	Litigation	Lexis/Nexis
Searcher Prep & Review Time:	<u>5</u>	Fulltext	Sequence Systems
Clerical Prep Time:		Patent Family	WWW/Internet
Online Time:	<u>70</u>	Other	Other (specify)

10/086, 844

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CLAIMS

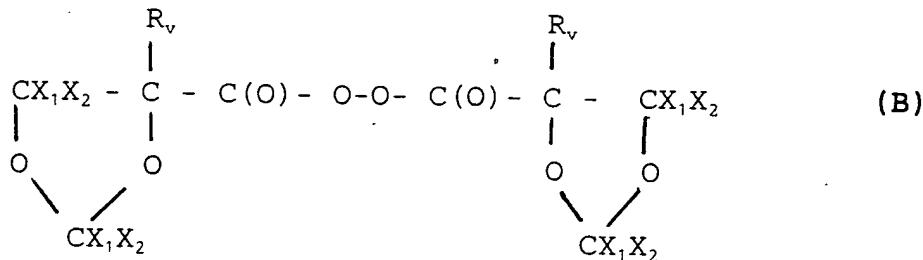
1. Perfluorodiacylperoxides having the following structures:



wherein:

when R_f is F, R_f' , R_f'' are both $-CF_3$;

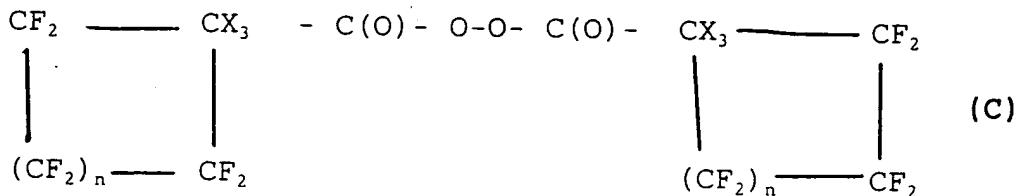
when R_f is $-CF_3$, R_f' and R_f'' are C_1-C_3 linear or branched perfluoroxyalkyl groups;



wherein:

R_v is selected from F, perfluoroxyalkyl, C_1-C_3 linear or branched perfluoroalkyl;

X_1, X_2 are selected from F, perfluoroalkyl, C_1-C_3 linear or branched perfluoroxyalkyl.



wherein:

$n = 1-3$

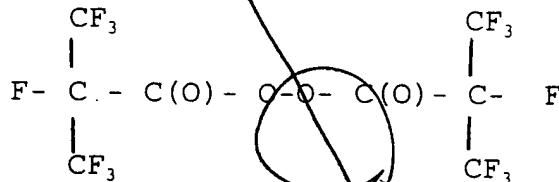
X_3 is selected from F, C_1-C_3 linear or branched perfluoro-

alkyl, with the proviso that for $n = 3$, X_3 cannot be F; said perfluorodiacylperoxides meet the following condition: the thermal decomposition constants K_d (sec^{-1}) in the presence of water do not undergo substantial variations with respect to the thermal decomposition constants in absence of water.

2. A polymerization process of one or more fluorinated monomers wherein the perfluorodiacylperoxides according to claim 1 are used as polymerization initiators.

3. A polymerization process according to claim 2, wherein the polymerization is carried out in aqueous medium, in suspension, in emulsion or in microemulsion.

4. A polymerization process according to claims 2-3, wherein at temperatures of the order of 50° - 80°C , the perfluorodiacylperoxides of structure (C) or the compound of structure (A) having the formula:



are used.

5. A polymerization process according to claims 2-3, wherein at temperatures of the order of -20° - $+25^\circ\text{C}$, the perfluorodiacylperoxides of structure (A) of formula: